Amendments to the Claims:

Cancel claims 1-33.

34. (currently amended) A method for fabricating a light generating die with fiducials from a multi-layered structure comprising a substrate and an etch-stop layer, the method comprising the steps of:

(1) depositing an etch-stop layer over said structure;

(2) etching through said etch-stop layer and said structure to form an active mesa defined by cavities on either side and a fiducial, said fiducial comprising at least one feature positioned in a known spatial relation relative to said active mesa;

(3) regrowing one or more layers on said structure;

(4) selectively etching a portion of said regrowth layer to expose said fiducial; and

~~The method of claim 1, further comprising~~ (5) disposing a blocking layer in said cavities~~between said central mesa and said side mesa~~.

35. (currently amended) A method for fabricating a light generating die with fiducials from a multi-layered structure comprising a substrate and an etch-stop layer, the method comprising the steps of:

(1) depositing an etch-stop layer over said structure;

(2) etching through said etch-stop layer and said structure to form an active mesa and a fiducial, said fiducial comprising at least one feature positioned in a known spatial relation relative to said mesa;

(3) growing one or more layers on said structure, wherein said one or more layers comprises a protective layer on said fiducial, and ~~The method of claim 1, wherein~~ wherein said protective layer comprises blocking material; and

(4) selectively etching a portion of said regrowth layer to expose said fiducial.~~,~~

36. (currently amended) The method of claim 34, wherein said growing step comprises disposing a burying layer on a top surface of said etch-stop layer of said ~~central~~ active mesa and on a top surface of said protective layer.

37. (original) The method of claim 34, wherein said disposing of said blocking layer is by MOCVD.

38. (original) The method of claim 34, wherein said disposing of said blocking layer is by LPE.

39. (currently amended) The method of claim ~~1~~35, wherein ~~said disposing of~~ said protective layer is disposed by MOCVD.

40. (currently amended) The method of claim ~~1~~35, wherein ~~said disposing of~~ said protective layer is disposed by LPE.

Cancel claims 41-51.

52. (new) A light-generating die with fiducials obtainable from a process comprising the steps of:

depositing an etch-stop layer over a multi-layered structure comprising a substrate and an etch-stop layer;

etching through said etch-stop layer and said structure to form an active mesa and a fiducial, said fiducial comprising at least one feature positioned in a known spatial relation relative to said mesa;

regrowing one or more layers on said structure; and

selectively etching a portion of said regrowth layer to expose said fiducial.

53. (new) A light-generating die with fiducials obtainable from a process comprising the steps of:

forming a multi-layered structure comprising a substrate and an etch-stop layer by at least:

providing a buffer layer on said substrate;

growing a first quaternary layer on said buffer layer;

growing a cladding layer on said first quaternary layer; and

growing a second quaternary layer on said cladding layer, said second quaternary layer being said etch-stop layer;

forming an active mesa and a fiducial on said structure, said active mesa being defined at least partially by etched cavities surrounding it, said fiducial comprising at least one feature positioned in a known spatial relation relative to said mesa, wherein said step of forming comprises at least:

etching through said etch-stop layer and said structure using reactive ion etching

disposing a photoresist over said fiducial;

further etching said structure and said active mesa to form etched cavities surround said active mesa;

removing said etch mask and said photoresist to expose said fiducial; and

disposing a blocking layer in the etched cavities defining said active mesa

regrowing one or more layers on said structure by at least:

disposing protective layers on said fiducial, and

disposing a burying layer on said active mesa by MOCVD or LPE; and

selectively etching a portion of said regrowth layer to expose said fiducial.

54. (new) A light-generating die having fiducials and being obtainable by a process comprising the steps of:

depositing an etch-stop layer over a multi-layered structure comprising a substrate and an etch-stop layer;

etching through said etch-stop layer and said structure to form an active mesa and at least two fiducials, each fiducial comprising at least one feature positioned in a known spatial relation relative to said mesa, each fiducial being a visual fiducial comprising a void in said multilayer structure having visible features in at least two dimensions;

regrowing one or more layers on said structure; selectively etching a portion of said regrowth layer to expose said fiducial; and

placing a wettable material in said voids of fiducials.

55. (new) A light-generating die having fiducials and being obtainable by a process comprising the steps of:

depositing an etch-stop layer over a multi-layered structure comprising a substrate and an etch-stop layer;

etching through said etch-stop layer and said structure to form an active mesa and at least two fiducials, each fiducial comprising at least one feature positioned in a known spatial relation relative to said mesa, each fiducial being a visual fiducial comprising a void in said multilayer structure having visible features in at least two dimensions;

regrowing one or more layers on said structure; selectively etching a portion of said regrowth layer to expose said fiducial; and

forming metal pads in said voids.

56. (new) A subassembly comprising said die of claim 54 mounted on a substrate having a plurality of pads, said subassembly obtainable by a process comprising the steps of:

placing said die on said substrate such that each said void on said die roughly overlays one of said plurality of pads on said substrate; and

melting said wettable material, whereby each of said pads on said die is brought into fine alignment with said mating pad on said substrate via surface tension of said wettable material.

57. (new) A subassembly comprising the die of claim 55 mounted on a substrate having a plurality of pads, said subassembly being obtainable by a process comprising the steps of:

placing said die on said substrate such that each said void on said die roughly overlays a pad of said plurality of pads on said substrate; and

melting said wettable material, whereby each of said pads on said die are brought into fine alignment with said mating pad on said substrate via surface tension of said wettable material.

58. (new) A subassembly comprising the light-generating die of claim 54 mounted to a substrate having metal pads positioned to mate with said voids on said die, said subassembly being obtainable by a process comprising the steps of:

forming metal pads in said voids and then placing said wettable material on said metal pads;

placing said die on said substrate such that each said void on said die roughly overlays said mating metal pad on said substrate; and

melting said wettable material, whereby each of said metal pads on said die is brought into fine alignment with said mating metal pad on said substrate via surface tension of said wettable material.